

# Notice of Allowability

Application No.

10/613,659

Examiner

Yonas Bayou

Applicant(s)

DANFORTH ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/03/2003.
2. ☒ The allowed claim(s) is/are 1,3-15,17-32,34-45 and 47-55.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20070813.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 09/08/2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 08/15/2007

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other \_\_\_\_\_

  
KAMBIZ ZAND  
SUPERVISORY PATENT EXAMINER

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney Jon L. Roberts on August 15, 2007.

Claim 1 (CURRENTLY AMENDED) A method for providing restricted transmissions of cable modem (CM) configuration files maintained on a trivial file transfer protocol server (TFTP), the method comprising:

- using a dynamic host configuration protocol (DHCP) server to associate an un-modified CM configuration filename to a cable modem Internet protocol (IP) address upon receipt of a DHCP REQUEST;

- storing a coordination pass phrase on a DHCP server and a TFTP server;

- generating a first authentication key;

- creating a modified CM configuration filename by combining a CM configuration filename with the authentication key;

- transmitting the modified CM configuration filename to the cable modem in a DHCP RESPONSE;

- transmitting the modified CM configuration filename from the cable modem to the TFTP server;

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parsing the modified CM configuration filename into the un-modified CM configuration filename;

generating a second authentication key;

transmitting the CM configuration file to the cable modem only if the first authentication key matches the second authentication key;

wherein the first authentication key and the second authentication key depend upon the un-modified CM configuration filename, the cable modem IP address and the coordination pass phrase; and wherein the coordination pass phrase is not known to the cable modem.

Claim 2 (CANCELLED)

Claim 15 (AMENDED) A method for providing restricted transmissions of cable modem (CM) configuration files maintained on a trivial file transfer protocol server (TFTP), the method comprising:

using a dynamic host configuration protocol (DHCP) server to associate an un-modified CM configuration filename to a cable modem Internet protocol (IP) address upon receipt of a DHCP REQUEST;

storing a coordination pass phrase on a DHCP server and a TFTP server;

generating a first authentication key;

creating a modified CM configuration filename by combining a CM configuration filename with the authentication key;

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creating a cloaked modified CM configuration filename by cloaking the modified CM configuration filename;

transmitting the cloaked modified CM configuration filename to the cable modem in a DHCP RESPONSE;

transmitting the cloaked modified CM configuration filename from the cable modem to the TFTP server;

de-cloaking the cloaked modified CM configuration filename to obtain the modified CM configuration filename;

parsing the modified CM configuration filename into the un-modified CM configuration filename;

generating a second authentication key;

transmitting the CM configuration file to the cable modem only if the first authentication key matches the second authentication key;

wherein the first authentication key and the second authentication key depend upon the un-modified CM configuration filename, the cable modem IP address and the coordination pass phrase; and wherein the coordination pass phrase is not known to the cable modem.

Claim 16 (CANCELLED)

Claim 29 (AMENDED) A method for providing restricted transmissions of cable modem (CM) configuration files maintained on a trivial file transfer protocol server (TFTP), the method comprising:

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using a dynamic host configuration protocol (DHCP) server to associate an un-modified CM configuration filename to a cable modem Internet protocol (IP) and a cable modem media access control address upon receipt of a DHCP REQUEST;

storing a coordination pass phrase on a DHCP server and a TFTP server;

generating a first authentication key;

creating a modified CM configuration filename by combining a CM configuration filename with the authentication key;

transmitting the modified CM configuration filename to the cable modem in a DHCP RESPONSE;

transmitting the modified CM configuration filename from the cable modem to the TFTP server;

separately obtaining the cable modem media access control address associated with the cable modem IP address;

parsing the modified CM configuration filename into the un-modified CM configuration filename;

generating a second authentication key;

transmitting the CM configuration file to the cable modem only if the first authentication key matches the second authentication key;

wherein the first authentication key and the second authentication key depend upon the un-modified CM configuration filename, the cable modem IP address, the coordination pass phrase and the cable modem media access

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control address; and wherein the coordination pass phrase is not known to the cable modem.

Claim 33 (CANCELLED)

Claim 42 (AMENDED) A method for providing restricted transmissions of cable modem (CM) configuration files maintained on a trivial file transfer protocol server (TFTP), the method comprising:

using a dynamic host configuration protocol (DHCP) server to associate an un-modified CM configuration filename to a cable modem Internet protocol (IP) and a cable modem media access control address upon receipt of a DHCP REQUEST;

storing a coordination pass phrase on a DHCP server and a TFTP server;  
generating a first authentication key;

creating a modified CM configuration filename by combining a CM configuration filename with the authentication key;

creating a cloaked modified CM configuration filename by cloaking the modified CM configuration filename;

transmitting the cloaked modified CM configuration filename to the cable modem in a DHCP RESPONSE;

transmitting the cloaked modified CM configuration filename from the cable modem to the TFTP server;

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separately obtaining the cable modem media access control address associated with the cable modem IP address;

de-cloaking the cloaked modified CM configuration filename to obtain the modified CM configuration filename;

parsing the modified CM configuration filename into the un-modified CM configuration filename;

generating a second authentication key;

transmitting the CM configuration file to the cable modem only if the first authentication key matches the second authentication key;

wherein the first authentication key and the second authentication key depend upon the un-modified CM configuration filename, the cable modem IP address, the coordination pass phrase and the cable modem media access control address; and wherein the coordination pass phrase is not known to the cable modem.

Claim 46 (CANCELLED)

2. Claims 1, 3-15, 17-32, 34-45 and 47-55 are pending.

### ***Drawings***

3. Figures 1, 2 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected

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drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. IDS (Information Disclosure Statement) filed on 09/08/2003 have been checked. See attached PTO-1449. Item 24 on IDS filed has no date of publication and was not considered by the examiner. If Applicant wants to examine consider the item 24, Applicant needs to provide the date of publication in order for the examiner to review the IDS.

***Allowable Subject Matter***

5. Claims 1, 3-15, 17-32, 34-45 and 47-55 are allowed.

6. The following is an examiner's statement of reasons for allowance:

The primary reasons for the allowance of the independent claims 1, 15, 29 and 42 are the inclusion of the following limitations that are not found in the prior art and they are uniquely distinct features. The closest prior arts are McKinnin, III et al. (6,917,628), Synnestvedt et al. (6,598,057) and Beser (6,049,826).

McKinnin discloses a method of providing network access across a shared



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communications medium between competing users. The procedure includes the step of: generating cable modem configuration files, each of which limits bandwidth consumption by a CM of a user, sending the configuration files to a TFTP Server of the DOC Network; and sending a command either to each user's CM. Synnestvedt discloses a method and apparatus for generating configuration files using policy descriptions. The method includes: receiving the source identification encoded filename from CM, Parsing the source identification encoded filename, matching identification parameters to a set of configuration policy data, generating the configuration files and sending it to CM. And Beser discloses a method of initializing a network device with dynamic protocol servers. A protocol servers TFTP server is allowed to override a request for a standard configuration file whose name is supplied to a CM in a DHCP response message during initialization. TFTP server constructs a new configuration file for the CM and transfer it to the CM.

However, these three arts, singularly or in combination, fail to anticipate or render the following limitation:

"Independent Claims 1, 15, 29 and 42: wherein the first authentication key and the second authentication key depend upon the un-modified CM configuration filename, the cable modem IP address and the coordination pass phrase; and wherein the coordination pass phrase is not known to the cable modem."

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yonas Bayou whose telephone number is 571-272-7610. The examiner can normally be reached on m-f, 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



KAMBIZ ZAND  
SUPERVISORY PATENT EXAMINER

Yonas Bayou

YB